

being that the revised edition which is in preparation will not appear as yet and the fact that the still very valuable old one has not been available for a long time. We hope that this new edition (and a new edition of Sommer's *Kritische Erläuterungen* to this handbook) incorporating the research and results since 1913 will appear in the not too distant future.

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# BIBLIOGRAPHY OF STATISTICAL LINGUISTICS

There is now being finally revised at Harvard, for subsequent publication by the Comité International Permanent de Linguistes, a Bibliography of Statistical Linguistics. In order that the Bibliography may be as complete as it can be made, I should be very grateful if anyone who has noted recently published material within this field, that is to say since about the end of 1950, would send me a brief listing (author, title, place and date) that could be inserted into its appropriate place in the Bibliography.

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## LINGUA

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Hebrew "הָיָה", probably Japanese "a-ru" and Korean "i-ta", and certainly modern Mandarin 是 are examples for the latter variety<sup>59)</sup>.

This comparative semantic investigation shows that the two at first sight seemingly incompatible meanings "demonstrative pronoun" and verb "to be" are very well associable. The meaning of "is" in "John is a man" in these cases apparently evolved from the meaning of "this here, that there, this one, that one, he" in something like "John he man". The two homophonous Chinese words represented by 是 are, therefore, most likely not at all two words, but one and the same word with two semantically related meanings<sup>60)</sup>.

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<sup>59)</sup> That modern Mandarin 是 has already to be considered a verb is clear from the fact that it may, like other Mandarin verbs, be preceded by the negative adverb 不. This is not the case with demonstratives.

<sup>60)</sup> This has already previously been recognized by Peter A. Boodberg who in *Some Preliminary Remarks On The Evolution Of Archaic Chinese* HJAS, Vol. 2, p. 366, says: "是 and 也 representing the copula 'is' in archaic Chinese can indeed best be interpreted as demonstrative particles which, as in many other languages, perform the role of the verb 'to be'. We should, however, like to point out that 是 is still a demonstrative pronoun in archaic Chinese. Only in modern Mandarin can it be said 'to perform the role of the verb 'to be'". (Cf. footnote 59).

## THE ERGATIVE CONSTRUCTION IN MODERN INDO-ARYAN

### Summary

The ergative construction is found in widely distributed and structurally diverse languages in both hemispheres (e.g. North American Indian, Basque, North and South Caucasian, Paleoasiatic, Tibetan, Indo-Aryan, and Polynesian). In all these it presents certain common features, viz. the transitivity of the verb; the ergative, agentive, or instrumental case (*casus activus*) of the logical subject; and, in contrast to this, the object of the verb in the nominative case, or *casus passivus*, which is the characteristic of the logical subject of an intransitive verb. Indo-Aryan (Indic) uses the ergative construction with verbal forms containing or derived from the past participle passive, but in view of the presence of the nominative construction in the rest of the paradigm of conjugation, it is not normally conceived as passive. The passiveness of the verb in the ergative construction however is, from the standpoint of interpretation, a reasonable and useful assumption, and the ergative case is best reported by instrumental prepositions or the instrumental case, where this exists. Indeed the English passive construction, with its logical subject in the *by*-form, is the simplest approach to the ergative.

### I

A familiar exercise in English grammar as formerly taught shall serve here to introduce what is now sometimes called the ergative construction<sup>1)</sup>. Our exercise consisted in rewriting in the passive voice sentences with a transitive verb in the active: *the boys read the book* would accordingly appear as *the book was read by the boys*. We may observe that the main difference between these sentences resides in the incidence of emphasis: in the first sentence the doer of the action indicated by the verb assumes the status of the grammatical subject; in the second the doer is still conceived as the author of the action, but is at the same time invested with a different, as it were dependent grammatical status, which by the same token confers a greater prominence on the object of the verb<sup>2)</sup>. This is effected simultaneously in

<sup>1)</sup> This term, suggested by A. Ditt (cf. *Einführung in das Studium der kaukasischen Sprachen*, Leipzig, 1928), is now general in Soviet linguistics. Other names for the ergative case will be given later in the text.

<sup>2)</sup> O. Jespersen (see *Essentials of English Grammar*, London, 1933, p. 120)

three ways, because three elements are involved in our illustration: the emphasised object is placed first, i.e. accorded the priority normally reserved for the subject; the verb appears in the passive voice and agrees grammatically with the subjectivised object; and the subject — still the logical subject — becomes part of a syntagma corresponding to an instrumental or agentive case form in those languages which recognise case distinctions. If we translate our example into Latin or Russian we shall see that 'by the boys' is rendered *a pueris* (governed ablativ plural) and *mal'čikami* (independent instrumental plural) respectively. The Latin ablativ and the Russian instrumental function as 'ergatives' in this context, i.e. they indicate the doer of the action, or agent, where the verb is in the passive voice and congruent with the object turned grammatical subject. In the corresponding active construction both these languages present the agent as subject in the nominative case (L. *pueri*, R. *mal'čiki*). This case is the normal case of the grammatical subject, whether the transitive verb with which it is associated is in the active or in the passive voice. The logical, as distinct from the grammatical, subject, on the other hand, figures in one of two cases — the nominative, when the verb is active, and the ergative (variously named the 'active', 'agentive', 'ablativ', 'instrumental', 'energetic'), when the verb is passive. A characteristic difference between the two constructions obtrudes itself besides in the morphology of the verb. Where this resorts to auxiliaries, as in our examples from all three languages, viz. *was read*, L. *lectus est*, R. *byla pročítana*, the bearer of the meaning is a passive participle agreeing where possible with the grammatical subject. We see then that in studying the ergative construction we shall be concerned with the form and meaning of subject and object, as well as with those of the transitive verb which binds them in a nexus, or predicative syntagma.

## II

J. B. Gilchrist, in the first edition of his *Hindustani grammar*<sup>1)</sup>, rightly remarks that, although the sentences 'Tom beat John' and 'John was beaten by Tom' mean essentially the same thing, they are not completely synonymous and he proceeds to draw the legitimate conclusion that 'it is therefore not superfluous for a language to have both turns and thus be able to shift the point of view'.

<sup>1)</sup> *A Grammar of the Hindoostanee Language* (Calcutta, 1786).

appears to have been puzzled, or, as Duncan Forbes<sup>2)</sup> puts it, 'felt greatly embarrassed', by the use of the postpositive particle or case-index *ne* with the logical subject of a transitive verb in the past tenses of the language and sought to dismiss it as an explicative. To Forbes himself, writing at a much later date and aided by the illumination of linguistic science, this particle in its peculiar context presents no difficulty, but he admits that another particle (*ho*), which serves to define the object of the transitive verb, is semantically a stumbling-block.

Let us now examine the Hindustani construction to which these details belong. Since Forbes's time it has been known to European students of the modern Indo-Aryan (Indic) languages that Hindustani verbs which are transitive in meaning have their logical subject indicated by the particle *ne* in tenses formed from the past participle passive, whereas intransitive verbs assort with a logical and grammatical subject unaccompanied by *ne*. Let us compare, for instance, *mai ne likhā*<sup>3)</sup> (m.) 'I wrote' or *mai ne na likhā* 'I did not write' with *mai girā* (n.) 'I fell' or *mai na girā* 'I did not fall'. The ergative particle *ne*, which may be translated 'by' and therefore gives 'written by me' for *mai ne likhā*, appears in all the other forms of the verb which contain the past participle, viz. in the present perfect (*mai ne likhā hai* 'I have written'), the future perfect (*mai ne likhā hogā* 'I shall have written'), the perfect subjunctive, or conditional (*mai ne likhā ho* 'I may have written; if I have written'), and the pluperfect subjunctive or conditional (*mai ne likhā hotā* 'I might have written; if I had written'). At the same time it is important to observe that the form of the past participle does not vary here with the gender and number of its logical subject: thus Hindustani has not only *mai ne likhā*, but *us ne likhā* 'he/

<sup>1)</sup> *A Grammar of the Hindustani Language* (London, 1846).

<sup>2)</sup> I have preferred the 'traditional' and still generally accepted phonetic latinisation of the Indian alphabets in a modernised form to the semiphonetic transcription given in, say, A. H. Harley, *Colloquial Hindustani* (London, 1944), because it is not only the better known but the simpler of the two transcriptions. Examples taken from this book and from T. G. Bailey, *Teach Yourself Hindustani* (London, 1950), as well as those mentioned in footnotes 10 and 11, have been transliterated into the traditional system. Other Hindustani examples in the text derive from D. Forbes, *A Hindustani Manual*<sup>20</sup> (London, 1912), and G. A. Grierson, *Linguistic Survey of India*, IX, 1 (Calcutta, 1916), both of which use it.



she wrote', *āp ne likhā* 'you wrote', and *unhō ne likhā* 'they wrote'. Changes in the form of the past participle, normal as indices of gender and number where the verb agrees with a nominative subject, occur only if an object is present in the ergative sentence: we may, for instance, say *us ne cīlīhī likhī* 'he/she wrote a letter', where the past participle is feminine singular in agreement with the feminine noun *cīlīhī* 'letter'. But if the object is particularised by the particle *ko*, the verb that governs it is excluded from case-relationship with both subject and object, and the construction becomes impersonal and assumes the 'neutral' form of the masculine singular, e.g. *us ne cīlīhī ko likhā* 'he/she wrote the letter', which may be analysed in terms of English as 'by him/her, (as to) the letter, it was written'. We observe here that the purpose of the particle *ko* is to isolate and define the object (cf. *us ne cīlīhī likhī*), and this gives the sentence under review a clearly tripartite appearance. Comparison of our two types of ergative construction — the definite (object with *ko*) and the indefinite (object without *ko*) — with the nominative construction, found, for instance, in the past tenses of intransitive verbs (*voḥ girā* 'he fell', *voḥ girī* 'she fell', *voḥ/ve girē* 'they fell') shows that the absence of particles makes possible the establishment of semantic, if not formal, concord in gender and number between subject and verb. This concord is generally expressed by the form of the verb (cf. *voḥ girā* with *voḥ girē*), but where the noun-subject can indicate gender and number formally, the concord is expressed redundantly in both subject and verb (e.g. *larḥā calā* 'the boy walked', *larḥī calī* 'the girl walked', *larḥe calē* 'the boys walked', *larḥiō calī* 'the girls walked').

The ergative construction in modern Indo-Aryan, though formally and historically passive, is not apparently felt as such, for Hindustani, like English, has also a true passive construction, although this is not so extensively used as its English counterpart. It is formed by conjugating the past participle of the verb with *jānā* 'to go' as auxiliary (cf. *G. gehen in verloren gegangen*). Thus *cīlīhī likhī gāī* means 'a letter was written' (literally 'letter written went') and *cīlīhīā likhī gāī thī* 'letters had been written'. Both verbs — the participle and the auxiliary — are subject to the rules of gender and number, and these rules, as our second example shows, apply equally to other associated auxiliaries (cf. also *maī dekhā jā rahā thā* 'I (m.) was being seen' and *maī dekhī jā rahī thī* 'I (f.) was being seen'). It is characteristic of Hindustani that

there are restrictions on the use of the passive, which are generally imposed by the demands of the ergative construction. The general rule appears to be that choice of the passive implies exclusion of the agent. Nevertheless the agent emerges exceptionally in the passive construction, and then the word designating it is given the oblique form in association with *hāth* 'hand' as an ergative particle (e.g. *voḥ dushman ke hāth latīnār se mārā gayā* 'he was killed with a sword by the enemy, lit. he (by) enemy's hand with sword killed went'). But such exceptions merely set wide limits to the operation of the ergative construction, which may be regarded as one substitute for the English passive in translating from English into Hindustani.

The use of the ergative construction in Hindustani is confined, as we have seen, to the semantic sphere of the transitive verb. This however is a generalisation to which we shall find notable exceptions. A number of verbs which are either transitive in meaning (e.g. *lānā* 'to bring') or capable of assuming transitive function (e.g. *bolnā* 'to speak', *bhūlnā* 'to forget', *phūnā* 'to reach') do not require their subject to be in the ergative case at all, even when the object is expressed: thus *voḥ jhūṭ bolā* 'he told a lie' is permitted by idiom, as well as *us ne jhūṭ bolā*, and *voḥ kṛā bolā* 'what did he say?' has no alternative construction. Accordingly the presence of an object is not always a condition precedent to the choice of the ergative case for the subject. In some instances there is hesitation in the use of *ne*, which may or may not appear with, e.g. *parḥnā* 'to read', *sikhnā* 'to master', *hārnā* 'to lose', and *jītnā* 'to win', when these verbs are used transitively. In one instance the nature of the object decides whether *ne* shall appear or not, viz. *maī ne cahā* 'I wish' is contrasted with *merā jī cahā* 'my heart desired'. To add to the complexity, certain intransitive or intransitively used verbs may have their subjects in the ergative case (e.g. *luṭhnā* 'to spit; to despise' and *jhāhnā* 'to peep').

So far we have considered only simple verbs, but Hindustani is particularly rich in compound verbs, and as these offer considerable variety semantically we find that the general rules governing the use of *ne* are still further limited. A compound verb requires an ergative subject if both components require it separately: thus *kah dēnā* 'to say' is compounded of *kahnā* 'to speak' and *dēnā* 'to give', both of which are transitive, and accordingly the subject of *kah dēnā* is accompanied by *ne* (e.g. *maī ne se/ kah diā* 'I said plainly'). A similar example, but

with a *ko*-isolated definite object, is *hīthī ne sher ko mār dālī hai* 'the elephant has killed the tiger'. In contrast to these types, compound verbs such as *ro denā* 'to cry' or *ho lenā* 'to accompany' have each only one component which is a *ne*-verb, viz. *denā* 'to give' and *lenā* 'to take', and therefore do not participate in the ergative construction (e.g. *larhī ro dī* 'the girl started crying'). It will have become obvious by now that the Hindustani ergative construction is a formally passive construction, conceived through its intimate association with the other members of the active-voice paradigm, as active rather than passive. In literal translation, say into English, the formally passive elements come into relief, but semantically they are part of an idiomatic nexus which emphasises the agent by giving it priority and an almost nominative status in the sentence. That this is so is proved not only by the native speaker's conception of the ergative construction as a syntagma of the active voice, but by the hesitations and interchanges between nominative and ergative as subjects of certain 'ambivalent' types of verbs, which are on the periphery of the transitive group. The parity of the nominative and ergative constructions is also evident in the use of the two cases in the same sentence with the same subject, viz. *voḥ jhāt phir āi aur (us ne) kahā* 'she quickly returned and said', where *ne*, though not expressed, is implied by the presence of the incongruent participle.

### III

Hindustani, whether in its Urdu or its Hindi variety, may be considered as typical of the modern Indo-Aryan languages, being also both geographically and historically the central type. From the historical Midland nucleus (*Madhyadeśī*) of the Indo-Aryan territory, or G. A. Grierson's Inner Band <sup>9)</sup>, which is located in the Gangetic Doab (Ganges-Jumna) and where the varieties of the 'pivot' Western Hindi are spoken, we may distinguish, radiating outwards, two concentric and roughly circular zones of languages known as the Intermediate and the Outer Band. Following a counter-clockwise direction from north to east, we have in the Intermediate Band — Pahari, Panjabi, Rajasthani, Gujarati, and Eastern Hindi. The Outer Band is more

<sup>9)</sup> See 'Indo-Aryan Languages' in *Encyclopaedia Britannica*, XIV (New York, 1911) pp. 487—90.

complex, and Grierson has resorted in part to A.F.R. Hoernle's <sup>7)</sup> purely geographical classification by recognising the following groups, still arranged in the counter-clockwise order, viz. (1) North-Western (Kashmiri, Lahnda, Sindhi), (2) Southern (Marathi), and (3) Eastern (Bihari, Oriya, Bengali, Assamese).

If we adopt Grierson's classification of the modern Indo-Aryan languages and accept Western Hindi as nuclear, we shall have in the usage of this language-group, typified in Hindustani, a standard by which to assess the characteristics of the others. We shall therefore postulate the ergative case in *ne* as typical and note divergences from it in cognate languages as 'marginal'.

The varieties of Western Hindi other than Hindustani are generally given as Braj and Kanaui, and we find that *ne* (or *nē*), as the index of the ergative case, figures in all three (cf. Hind. *us ne kahā* 'he said' with Braj *uā nē kahī* and Kanaui *uñi ne kahī* <sup>9)</sup>). This case particle reappears in an identical or in a somewhat different form in the Intermediate Band (e.g. Garhwali-Pahari *phān wai kā pūs bole* <sup>9)</sup> 'his father said to him'; Panjabi *uñ nai ik cilliñ līkhī hai* 'he has written a letter'; Malwi-Rajasthani *phir o ne o se kiyo* 'then he said to him'), as well as in some languages of the Outer Band (e.g. Kashmiri erg. *tsiran* 'by the thief, nom. *tsir* 'thief'; colloquial Marathi <sup>10)</sup> *mūlāna* 'by the boy' *mūlānī* 'by the boys'). Other languages of the two bands either make use of a different particle altogether (e.g. Nepali *le*, Gujarati *e*), or else do not use an ergative particle at all (e.g. colloquial Bengali has the 'instrumental' postpositions *dara* and *die*; *laha(r)* *dara* 'by him', *take die* 'by him' <sup>11)</sup>). In still other languages the formal difference between the two cases has been reduced to one between the nominative and the oblique, and this involves merely a vowel apophony (e.g. Sindhi nom. *ghoro* 'horse', erg. *ghore*; Lahnda nom. *ghorā*, erg. *ghore*). In extreme cases, as in types of Eastern Hindi and Bihari, the difference has been completely obliterated (cf. Marwari-E. Hindi *bāp uce nā kayo* 'the father said to him' with Hindustani *bāp ne us se kaha* <sup>12)</sup>), yet here

<sup>7)</sup> *A Comparative Grammar of the Gaudian Languages with Special Reference to the Eastern Hindi* (London, 1880).

<sup>9)</sup> *LSI*, IX, 1.

<sup>10)</sup> *LSI*, IX, 4.

<sup>11)</sup> Hester M. Lambert, *Marathi Language Course* (Calcutta, 1943).

<sup>12)</sup> W. S. Page, *An Introduction to Colloquial Bengali* (Cambridge, 1934).

<sup>13)</sup> *LSI*, IX, 2.

too the participial form of the verb suggests to analysis an originally different construction. A final device for indicating the ergative construction formally is the use of pronominal suffixes in several languages of the Intermediate and Outer Bands (e.g. Awadhi-E. Hindi *mārīñ* 'I struck her, lit. she was struck by me'; Lahnda *mārem* 'I killed him'; Kashmiri *karyom* 'I made him'). These suffixed verbal forms are additional proof, if such were needed, of the original difference between the nominative and ergative constructions and of the 'activation' of the latter.

The incidence of the ergative particle *ne* and its variants shows that, although it is a characteristic of mainly the Inner Band languages, it is in fact also found not only in the adjacent Panjabi and Pahari, but vestigially in Kashmiri and, with differentiation for number, in Marathi. In the Intermediate Band we generally observe a different index (*e*, *le*) and in the Outer Band, except in the conservative Marathi, either no index at all or an 'instrumental' syntagma as substitute.

## IV

The parallels between the nuclear and marginal types of Indo-Aryan, which have been noted so far, have been exclusively morphological expressions of function. They extend however to syntactic rules. Here we may consider the diverse uses of the ergative construction in languages representing the Intermediate and Outer Band groups. It is invariably confined throughout these groups to syntagmas into which past tense forms enter as essential constituents. Panjabi follows the same rules as the varieties of Western Hindi. Of the other Intermediate Band languages, Gujarati and Rajasthani agree with Hindustani in the main, except that Gujarati uses the neuter instead of the masculine form of the past participle in the ergative construction without an expressed object. Where an object is expressed, it is defined in both languages, as in Hindustani, by a 'dative' particle, which however does not prevent the concord of object and past participle. Let us compare, by way of illustration, Gujarati *rājī e wāghay ne* (dat.) *mārī* 'the prince killed the tigers' with Hindustani *rājā ne shernī ko* (dat.) *mārā*<sup>13</sup>. In the first sentence the past participle is feminine in agreement

<sup>13</sup> G. A. Grierson, 'Gujarati and Rajasthani' (*EB*, XII, New York, 1910, p. 712).

with the feminine noun *wāghay* 'tigress', whereas in the second *mārā* is in the 'neutral' masculine form, because the feminine object *shernī* 'tigress' is 'protected' by the particle *ko*. Like Gujarati, the adjacent Outer Band Marathi distinguishes three genders, in contrast to the beneric Hindustani, and has a neuter past participle where the Hindustani form is masculine. But, like Hindustani, this language has an 'independent' past participle in ergative constructions, where the object either remains unexpressed or is indicated by a 'dative' particle (e.g. *tya-ne Rāmās mārīlē* 'he struck Rām')<sup>14</sup>. A parallel construction involves the future participle passive (e.g. *mūlgyā-nē pholī-lā vācāwē* 'the boy should read the book')<sup>15</sup>. In both our Marathi illustrations, representing transliterations of the written language, the verbal forms are neuter and impersonal, which means that they are to be construed as 'it was struck' and 'it is to be read' respectively. In Nepali, or Gurkhali, an 'eccentric' easterly type of Pahari, the ergative case is used with transitive verbs in other than the past and future tenses. This is at variance with common Indo-Aryan practice and appears to have a parallel in the neighbouring Tibetan (cf. Tib. *ñas-kyod rñuñ* 'I beat you, lit. by me you beaten')<sup>16</sup>.

Indian grammarians, followed by Beames<sup>17</sup> and Grierson<sup>18</sup>, distinguish three *prayogas*, or constructions, for the expression of past time — *kārīari* (subjective), *karmāni* (objective), and *bhāve* (impersonal), which Beames illustrates with the Latin sentences *rex urbem condidit*, *a rege urbs condita*, and *a rege urbi conditum est* respectively. The first emphasises the subject, the second the object, and the third the action. Emphasis on the subject creates the concord of noun and verb, determined by the former; where the emphasis is on the object, the concord is between this and the verb, also determined by the former; and in the impersonal construction both subject and object are detached from the verb, which accordingly assumes a 'neutral' — in

<sup>14</sup> J. Bloch, *La formation de la langue marathe* (Paris, 1915) and *L'indo-aryen du Vêda aux temps modernes* (Paris, 1934).

<sup>15</sup> G. A. Grierson, 'Marathi' (*EB*, XVII, New York, 1911, p. 674).

<sup>16</sup> G. von der Gabelentz, *Die Sprachwissenschaft* (Leipzig, 1901).

<sup>17</sup> J. Beames, *A Comparative Grammar of the Modern Aryan Languages of India*, I—III (London, 1872—79).

<sup>18</sup> G. A. Grierson, 'On the Radical and Participial Tenses of the Modern Indo-Aryan Languages' (*Journal of the Royal Asiatic Society of Bengal*, LXIV, I, Calcutta, 1896, pp. 352—75).

Latin and Marathi a neuter — aspect. In the last two constructions the logical, as distinct from the grammatical, subject is represented in the 'subordinate' form of 'agent', and in the last construction the object is isolated in an 'extrasubjective' case. The subjective construction is generally used in present and future tenses, i.e. to express 'unfixed' time. Where time is conceived as 'fixed', or past, interest shifts from the doer to the done, or the action and its outcome. When the object appears in the nominative case it may be taken to be in a subjective relation to the verb, and this assumes the 'plastic' form of the past participle, which demands concord between itself and the object. Such concord is nominal, i.e. it extends to gender and number, and not pronominal and personal. The impersonal construction has the object in a case which Keames defines on formal grounds as a dative (hence *utbi conditum est* in the Latin example). Its postposition may be compared however not only with Spanish *a*, but with Rumanian *pe*, Hebrew *-lāh* and Persian *-ra*, all of which serve to define the object, personal or impersonal, of a transitive verb. The forms of this postposition, indeed, are more diverse and more numerous than these parallels from other languages (cf. Hind. *ko*, Panj. *nū*, Sindh. *kae*, Guj. *nē*, Mar. *lā*, Beng. *ke*, Oriya *ku*, Nep. *lāi*).

The *karari prayoga*, with its verb grammatically subservient to the subject, is, as we have seen, an active construction in comparison with the other two *prayogas*, which are passive and therefore present the logical subject 'obliquely'. The oblique (ergative) subject inevitably figures in the *bhāve prayoga*, where the emphasis is also transposed from the logical subject, and the object of the verb becomes a sort of *dativus commoti*, so that the verb can be given a maximum of prominence. All three constructions imply the presence of a transitive verb, and generally, where the verb can be either transitive or intransitive, it is the semantics of the verb which, with the exceptions already noted, determines the choice of the antithetic *karari* and *karmaji prayoga*. The intransitive verb requires the use of the former, so that when an 'ambivalent' verb is intransitive in a particular context, its intransitive function invests the *karari* form. This means that for the intransitive verb the morphologically significant factor is the subject of the sentence, with which the verb must agree in number and person and, where possible, also in gender <sup>19</sup>. We have observed this

<sup>19</sup> Grierson, *op. cit.*

in Hindi, and it is found in Panjabi, Sindhi, Gujarati and Marathi. The *karmaji prayoga* is in some respects a sort of link between the contrasted *karari* and *bhāve* types. It is 'personal', like the former, though its nominal nucleus is the object, and not the subject. With the *bhāve prayoga* it shares an ergative subject and an object, though the latter is not defined, as it is in the *bhāve prayoga*. Accordingly the verb in both the *karmaji* and *bhāve prayogas* is transitive and takes an object.

The *bhāve prayoga* occurs along with the *karmaji* type in Hindi, Panjabi, Gujarati, and Central Pahari. In Ladinda and Nepali, on the other hand, we have only the *bhāve* type, as the verb does not inflect for gender. In Sindhi and Kashmiri the ergative takes the form of a pronominal suffix. The loss of gender and generally the obliteration of the formal distinction between nominative and ergative in the eastern group of Indo-Aryan have not entirely obscured awareness of the passive quality of the transitive verb in its past tense. In these languages, even where the verb is intransitive, the *bhāve prayoga* is resorted to (e.g. Beng. *calien* means 'he went, lit. it was gone by him') <sup>20</sup>, for the personal suffixes of the eastern group are 'instrumental' (ergative), and there is no formal distinction between the past tense of a transitive and that of an intransitive verb, except in Bihari (Maithili), which holds them apart in the 3rd person singular and plural (cf. Bih. *calai* 'he went' *calalah* 'they went' with *māralah* 'he struck', *māralani* 'they struck') <sup>21</sup>.

## V

We have referred to the presence of the ergative construction in Tibetan, where, as we have seen, it is not confined to a restricted area of the verb. It should therefore be instructive to examine parallels to our Indo-Aryan ergative constructions, the *karmaji* and *bhāve prayogas*, in other languages, which, like Tibetan, are genetically of very different type. The Tibetan sentence we have quoted from H. G. von der Gabelentz <sup>22</sup>, viz. *na-s rhyod rdun* 'I beat you', where *s* is the index of the ergative case, is paralleled by similar constructions in *intelligible Panjabi from North American and Palenquian types to*

<sup>20</sup> Grierson, *op. cit.*

<sup>21</sup> Grierson, *op. cit.*

<sup>22</sup> *Op. cit.* in fn. 16.

Basque, North and South Caucasian types, and Polynesian. Let us take, as representative languages for purposes of illustration, Ojibway (North Amerindian), Basque, Abkhaz (North Caucasian), Georgian (South Caucasian), Chukcha (Palaeoasiatic), and Samoan (Polynesian).

Comparison of, say, Ojibway forms <sup>23</sup> such as *ninwābanigo* 'I am seen' and *ninwābanig* 'he sees me', *wābana* 'he is seen', and *ninwābana* 'I see him' suggested to C. C. Uhlenbeck the passiveness of the transitive verb in this and in cognate Amerindian language. The inference here is that the pronominal element functions as an ergative, which Uhlenbeck at first <sup>24</sup> called *casus activus* and subsequently *casus energicus*, opposing it to a *casus passivus*, later *casus inertiæ*. The passivity of the verb in the ergative construction had been observed as early as the 1860's and 1870's by H. G. von der Gabelentz <sup>25</sup> and A. F. Pott <sup>26</sup> in Tibetan and Basque respectively, and Pott distinguished two contrasted types of nominative — a *nominativus activus* and a *nominativus passivus* — inferring from his investigations that 'es gibt in solchen Sprachen keinen echten Nominativ als grammatisch ausgeprägte Form für ein Satzsubjekt'. A similar contrast, though in different terms, was pointed by R. de la Grasserie <sup>27</sup>, who uses *médio-passif primitif* for the ergative case and *passif normal ou hystrogne* for the passive case. It is clear then that 19th-century scholars felt the ergative of non-Indo-European languages to be distinct from the Indo-European nominative and tried to find suitable names for it within the orbit of the passive construction.

Friedrich Müller <sup>28</sup> and Hugo Schuchardt <sup>29</sup>, after carefully studying

<sup>23</sup> C. C. Uhlenbeck, 'Het passieve karakter van het verbum transitivum of van het verbum activum in talen van Noord-Amerika' (*Verslagen en Mededeelingen der Kon. Akademie van Wetenschappen*, Afd. Letterkunde, V, 2, 2, Amsterdam, 1916, pp. 187 ff.).

<sup>24</sup> 'Zur Casuslehre' (*Zeitschrift für vergleichende Sprachforschung*, XXXIX, 1906, pp. 600—03).

<sup>25</sup> 'Über das Passivum. Eine sprachvergleichende Abhandlung' (*Abhandlungen der Kön. Sächsischen Gesellschaft der Wissenschaften*, Phil.-hist. Klasse, III, Leipzig, 1861).

<sup>26</sup> 'Unterschied eines transitiven und intransitiven Nominativs' (*Beiträge zur vergleichenden Sprachforschung*, VII, 1873, pp. 73 ff.).

<sup>27</sup> *De la catégorie des voix* (Paris, 1899).

<sup>28</sup> *Grundriss der Sprachwissenschaft*, III, 2, (Vienna, 1876—88, p. 7).

<sup>29</sup> 'Über den aktivischen und passivischen Charakter des Transitivity' (*Judgermanische Forschungen*, XVIII, Strassburg, 1905—06, pp. 528—31).

the Basque transitive verb, recognised its passive character, and though this view was at first avoided by Uhlenbeck <sup>30</sup>, who laid emphasis on the transitive-intransitive antithesis, he too subsequently accepted it, as against A. Trombetti <sup>31</sup>, who treats the Basque ergative construction as active. Disinterested examination of typical Basque ergative syntagmas however confirms the rightness of the view which conceives the transitive verb as a passive formation. Let us note here such instances as *gizonak ikusten da* 'the man sees him, lit. by the man he is seen' <sup>32</sup> and *ake etxe bat egiten dute* 'they are building a house, lit. by them a house is built' <sup>33</sup>, where the verb is transitive and takes an object, and let us contrast them with examples containing an intransitive verb, e.g. *gizona ez dator* 'the man is not coming' <sup>34</sup> and *ake dirra* 'they are' <sup>35</sup> (cf. Sp. *ellos/ellas son*). It will be noticed that the ergative suffix is identical with that of the plural, but this homophony need not mislead us into interpreting, say, *ake dirra* 'they are' and *ake dute* 'they have it' as exhibiting identical case-forms of the subject (cf. *gizona-k* 'by the man; the men'), in view of the antithesis of, for instance, *ni naiz* 'I am' (cf. Sp. *yo soy*) and *nik del* 'I have it', where the *-k* of *nik* is plainly ergative. There is then a contrast between the subject of a transitive and that of an intransitive verb and, as examples like *dakar* 'he is carrying' and *da-kar-t* 'I am carrying him, lit. he is carried by me' show, *da* being both 'he' and 'him', the unsuffixed or passive-case form represents equally the subject of an intransitive and the object of a transitive verb.

In the North-West Caucasian Abkhaz <sup>36</sup> the ergative construction, involving the presence of a transitive verb in the passive voice <sup>37</sup>,

<sup>30</sup> 'Karakteristiek der Baskische grammatica' (*Verslagen en Mededeelingen der Kon. Akademie van Wetenschappen*, Afd. Letterkunde, V, 8, 1, Amsterdam, 1906, p. 28).

<sup>31</sup> *Elementi di glottologia* (Bologna, 1923).

<sup>32</sup> P. de Zamarripa y Uruga, *Grammatica vasca* (Gaukoka, 1933).

<sup>33</sup> I. López y Mendizábal, *La lengua vasca* (Buenos Aires, 1943).

<sup>34</sup> Zamarripa y Uruga, *op. cit.*

<sup>35</sup> López y Mendizábal, *op. cit.*

<sup>36</sup> S. Kaznelson, *K genezisu nominativnogo predloženiia* (Moscow—Leningrad, 1936); A. Hašba, 'Die passive Konstruktion des abchasischen transitiven Verbums' (*Jaleitskij sbornik*, VI, Leningrad, 1930).

<sup>37</sup> H. Schuchardt, 'Über den passiven Charakter des Transitivity in den kaukasischen Sprachen' (*Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften*, Phil.-hist. Klasse, XXXIII, 1, Vienna, 1896).



is complicated by the simultaneous representation of class, which here turns on the antithesis of intelligent and non-intelligent and the dichotomy of the former into a masculine and a feminine gender. Accordingly we have three ergative indices, viz.

intelligent	masc.	i- (i-)
	fem.	l-
non-intelligent		a-

which appear in use as follows: *də-z-gōji* 'I him/her (int.) take', *də-l-gōji* 'she him/her (int.) takes', and *də-šewēji* 'it (non-int.) kills him/her (int.)'. The object of the transitive verb, indicated here by the prefix *də/d-*, becomes the subject of an intransitive verb (e.g. *də-c'ēji* 'he/she went'). In the same way *i-(i-)*, a prefix formally identical with the masculine ergative index, functions as an object of the non-intelligent class (e.g. *ja-z-gōji* 'I took it'; *ja-a-gōji* 'it takes it'). Our translations of all the above examples, in which the Abkhaz verb is transitive, inevitably appear in the more idiomatic Indo-European active form, but it should be remembered that the equivalent of the ergative case with a passive verb may be used equally well and is in fact to be preferred as a less obvious distortion of the original: thus *də-l-gōji* may be construed as 'he/she by her is taken'.

In Georgian the choice of the ergative case in preference to the nominative is determined by the tense of the verb, viz. the aorist and the future subjunctive-optative of all active verbs and of some semantically 'middle' verbs<sup>39</sup>. The ergative-case index is *-m(a)*, and its use emerges clearly from the following illustrations: *kač'na saxi aašena* 'the man built a house'; *kač'na saxi unda aašeros* 'the man must build a house, lit. in order to build'; *adām tira* 'the mother burst out crying'; and *Petrem miirbna* 'Peter came up running'. In these sentences the object, if the verb is transitive, is given nominative form, i.e. it appears as the *casus passivus*, and in all of them, even with the verb intransitive, the ergative suffix is formally contrasted with a paradigmatic nominative, whose final vowel represents either the pure stem (as in *Petre*) or a distinct nominative (as in *kač'i* 'man' and *sax-li* 'house').

The Chukcha ergative construction, like most of our examples,

<sup>39</sup> B. M. Rudenko, *Grammatika gruzinskogo jazyka* (Moscow-Leningrad, 1940).

presupposes a transitive verb<sup>39</sup>, and the case of the object is identical with that of the subject of an intransitive verb (*casus passivus*). In contrast to this, the logical subject of a transitive verb exhibits a special ergative-case form. Compare, for instance, *kijavol čejyrkyn* 'the man is going (walking)' with *kijavolja koran'y lynyryknen* 'the man killed the deer', where *kijavol* 'man' and *koran'y* 'deer' are in the 'basic' passive, or nominative, case and *kijavolja* is ergative<sup>40</sup>).

An ergative case functions also in Samoan, where we find the object of a transitive verb picked out as the grammatical subject. This appears in *na faia e le Atua le lagi* 'God made heaven, lit. it was made by God, the heaven' and *sa teu e ia le pusa* 'he packed the box'. Here *e* is the ergative index, the second variety always preceding the pronoun, and it is regularly used, except when a pronoun precedes the verb, as in *'ua na faia fo'i fetu* 'He made the stars also'<sup>41</sup>).

## VI

Scrutiny of selected examples of the ergative construction in non-Indo-European languages, such as we have adduced in the preceding section, reveals points of a general similarity to that in Indo-Aryan. In some instances we observe considerable resemblance in detail (cf. the association of the ergative construction with the past tense in Indo-Aryan and, say, Georgian). In nearly all cases the ergative construction demands the presence of three elements: 1) a transitive verb, 2) an expressed object figuring as the grammatical subject, and 3) the logical subject denoted differently from the way in which it is when paired with an intransitive verb. The concords between noun-subject and verb-predicate peculiar to some of the Indo-European languages are lacking in other genetic types, and in none of these do we find the distinction between an indefinite object in the nominative and a definite object in the 'dative', which we have seen, for instance, in Hindustani. The use of the ergative construction without an object, found in Hindustani and in some of its cognates, is not found elsewhere, for the presence of an object is generally a condition precedent to the emer-

<sup>39</sup> I. I. Meščaninov, *Glagoľ* (Moscow-Leningrad, 1949), p. 84.

<sup>40</sup> The Chukcha forms are Latinised from Cyrillic originals: *i* indicates the palatalisation of the preceding consonant, and *'* is the velar nasal.

<sup>41</sup> S. Churchward, *A New Samoan Grammar* (Melbourne, 1926).